

CLAIMS

1. Nucleic acid encoding for a protein with endoribonucleasic activity wherein said protein with endoribonucleasic activity is characterized in that it is polyU and single filament specific, Mn^{++} ions dependent and able to release 2'-3' cyclic phosphate and 5'OH ends cleavage products.
2. Nucleic acid according to claim 1 substantially including SEQ ID No 1 nucleotide sequence, functional homologs thereof or a complementary sequence thereto.
3. Recombinant vector able to express effectively the inventive nucleic acid in prokaryotes according to claims 1 or 2.
4. Recombinant vector able to express effectively the inventive nucleic acid in eukaryotes according to claims 1 or 2.
5. Protein with endoribonucleasic activity characterized in that it is polyU and single filament specific, Mn^{++} ions dependent and able to release 2'-3' cyclic phosphate and 5'OH ends cleavage products or functional portions thereof.
6. Protein according to claim 5 encoded by nucleic acid according to claims 1 or 2.
7. Protein according to claim 6 having substantially SEQ ID No 2 amino acid sequence.
8. Use of the protein with endoribonucleasic activity according to any of claims 5 to 7 in analytical and/or synthetic applications.
9. Use according to claim 8 wherein the analytical applications are selected from the group consisting of RNA sequencing, point mutation detection, RNA molecular digital fingerprinting determination, RNA structural analysis, Rnase protection assays.
10. Use according to claim 8 wherein the synthetic applications consist of RNA degradation for the preparation of biological macromolecules.
11. Use according to claim 10 wherein biological macromolecules are selected from the group consisting of c-DNA, plasmid DNA, genomic DNA and recombinant protein.
12. Use of the protein with endoribonucleasic activity according to any of claims 5 to 7 for the preparation of pharmaceutical kits for molecular analysis of nucleic acids.
13. Use of the protein with endoribonucleasic activity according

to any of claims 5 to 7 for the preparation of pharmaceutical kits for the synthesis of biological macromolecules.

14. Use according to claim 12 wherein molecular analysis is RNA analysis.

5 15. Use according to claim 13 wherein biological macromolecules are selected from the group consisting of c-DNA, plasmid DNA, genomic DNA and recombinant protein.

10 16. Pharmaceutical kits for molecular analysis of nucleic acids, including the protein with endoribonucleasic activity according to any of claims 5 to 7.

 17. Pharmaceutical kits for synthesis of biological macromolecules, including the protein with endoribonucleasic activity according to any of claims 5 to 7.